



STATE MINING AND GEOLOGY BOARD

EXECUTIVE OFFICER'S REPORT



ARNOLD
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For Meeting Date: November 12, 2009

Agenda Item No. 8: Report on California Geological Survey Special Report 211, Radon Potential in the Lake Tahoe Area, California.

INTRODUCTION: The California Geological Survey (CGS) recently published Special Report 211 titled “*Radon Potential in the Lake Tahoe Area, California.*” Radon is a radioactive gas formed by decay of small amounts of uranium and thorium naturally present in rock and soil. Radon gas can sometimes migrate from underlying soil and rock into houses and become concentrated the indoor air. The United States Environmental Protection Agency recommended radon action level is 4 picocuries per liter (pCi/L). Between December 2006 and April 2007, an indoor-radon survey of 443 homes in the Lake Tahoe area using short-term charcoal detectors, was performed by the California Department of Public Health Radon Program (CDPH-Radon Program). A Radon Potential Zone Map for the Lake Tahoe Area was subsequently was prepared by CGS as part of an inter-agency agreement.

As reported, based on indoor-radon survey results, the radon potential zone map for Lake Tahoe developed by CGS, and 2000 census data, an estimated 23,400 people in the Lake Tahoe area live in residences likely to equal or exceed 4.0 pCi/L. An estimated 6,100 people live in houses that will likely test at 10 pCi/L or more, and about 900 are estimated to live in houses that will likely test at 20 pCi/L or higher. On a county basis, within the Lake Tahoe radon map area, the number of people residing in homes with radon of 4 pCi/L or above in short-term tests is estimated at: 19,100 in El Dorado County; 2,700 in Nevada County; and 1,600 in Placer County.

Because a relatively high percentage of available indoor-radon measurements for the Lake Tahoe area exceed 4 pCi/L, and almost 69 percent of the Lake Tahoe radon potential map consists of moderate to very high radon potential areas, indoor-radon testing should be encouraged throughout the Lake Tahoe area. Individuals planning new home construction in the Lake Tahoe area may wish to consider incorporating radon-resistant features into their building plans, particularly if the building site is located in a higher-radon potential area. If necessary, radon mitigation after construction is still possible but it will be more costly.

Information on radon remediation and radon resistant construction is available on the CDPHRP website at:

<http://www.cdph.ca.gov/healthinfo/vironhealth/Pages/Radon.aspx>.



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RADON INFORMATION REPORTS AND MAPS PUBLISHED BY CGS: Radon reports published by CGS are summarized below, and may be purchased through CGS:

- Special Report 211 - Radon Potential in the Lake Tahoe Area, California.
- Special Report 208 - Radon Potential in San Luis Obispo County, California.
- Special Report 201 - Radon Potential in Monterey County, California.
- Special Report 194 - Radon Potential in Ventura County, California.
- California Radon Measurements by Zip Code PDF (CDPH Radon Program).
- Special Report 182 - Radon Potential in Southern Los Angeles County.
- Radon Zone Map for Santa Barbara County.
- Radon Mapping in Santa Barbara and Ventura Counties, article from the November/December 1997 issue of California Geology magazine.
- Geologic Controls on the Distribution of Radon in California.



EXECUTIVE OFFICER'S RECOMMENDATION: The information presented is informational, not regulatory. The information contained in CGS Special Report 211 is intended to serve as a guide to prioritize areas for public education about naturally-occurring radon and for targeting additional indoor-radon testing activities. No recommendations are offered by the Executive Officer.

Respectfully submitted:

Stephen M. Testa
Executive Officer

